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EXAMINER

HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 07/23/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

MF-7

**- The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address -**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- \*U.S. GPO: 2000-472-999/43204

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The election with traverse is noted. However 1) no substantial argument was made as to why the restriction was improper, so it is taken as no traverse. 2) Claim 10 does not include all the limitations of the product claims- in fact, it does not include *any* substantial limitation of the product claims- and therefore it will not be rejoined if the product is allowed. 3) Claim 10 is requested to be canceled- and if it were, it cannot be rejoined (because it no longer would exist as a claim). Claims cannot be 'provisionally' canceled, and if cancellation is requested, it must be made as an amendment, and not a comment in the arguments section.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Jose-Yacaman et al article, with Ota et al. and Nolan et al. cited for inherent properties.

The article teaches on pg. 657 and 659 carbon nanotubes of rolled graphitic planes (hollow nanotubes). The material is compared to that of the very well known Iijima Nature 1991 product, which has a diameter of 1nm, as reported by Ohta et al. column 1. Therefore, it has the diameter claimed. The thickness part (ie, a section of the nanotube which can be assigned that name) is deemed to possess hydrogen because of the teaching of Nolan et al. column 1-2. Therefore, the fiber of Yacaman is deemed to possess the claimed properties, and was made using an iron catalyst. No differences are seen, especially as the synthesis is similar to that presently disclosed.

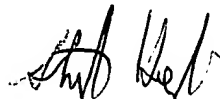
It is noted that the claims do not require that the 'hollow part' have a different thickness than the 'thickness part'. Perhaps a definite limitation thereto was meant.

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Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohta et al, with Nolan et al. cited for inherent properties.

Ohta teaches in column 5-6 hydrogenated fullerene materials bonded together to make complex structures of the claimed diameter, such as in fig 1A. From the bond length, the diameter is readily calculated to be within the claimed range. While hydrogen is not taught to be present in the C60 bulge, it is deemed present, since 1) it was there before the fabrication of the structure and only 1 atom is required by the claims and 2) Nolan column 2 indicates the presence of hydrogen even in so-called hydrogen-free systems. Therefore, the material of Ohta is deemed to possess the claimed properties.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.



Stuart Hendrickson  
examiner Art Unit 1754